



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,896	10/15/2001	Cheol-Woong Lee	042933/253085	3473
826	7590	08/20/2007	EXAMINER	
ALSTON & BIRD LLP			POPHAM, JEFFREY D	
BANK OF AMERICA PLAZA				
101 SOUTH TRYON STREET, SUITE 4000			ART UNIT	
CHARLOTTE, NC 28280-4000			PAPER NUMBER	
			2137	
			MAIL DATE	
			DELIVERY MODE	
			08/20/2007	
			PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/977,896

Applicant(s)

LEE ET AL.

Examiner

Jeffrey D. Popham

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**Remarks**

Claims 1-18 are pending.

**Response to Arguments**

1. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning (U.S. Patent 6,366,907) in view of Hale (U.S. Patent 6,732,180) and Gutberlet (Gutberlet, L., "Peer-to-Peer Computing – A Technology Fad or Fact?", 10/10/2000, pp. 1-16).

Regarding Claim 1,

Fanning discloses a method comprising collecting a digital music file according to a kind of music of the digital music file by searching a network (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); but does not disclose encrypting the collected digital

music file with a predetermined key, and redistributing the encrypted digital music file through the network.

Hale, however, discloses preventing reduction of sales amount of records due to a digital music file illegally distributed through a communication network by selecting an illegally produced digital music file, which is derived from a record of a cooperating record corporation, by searching the network (Column 7, line 24 to Column 8, line 37); modifying the digital music file (Column 8, lines 1-37), and redistributing the modified digital music file through the network (Column 8, line 38 to Column 9, line 32). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the rights protection system of Hale into the real-time searching system of Fanning in order to inhibit and deter unauthorized users to proprietary media, while leaving legitimate files unaffected, thereby rendering the use of media brokering systems ineffective, such that users will be less likely to use such systems for illegal purposes.

Gutberlet, however, discloses encrypting the collected digital music file with a predetermined key and redistributing the encrypted digital music file through the network (Pages 7-8). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the DRM system of Gutberlet into the real-time searching system of Fanning as modified by Hale in order to protect the copyrights of an entity

through licensing and distribution of keys, whereby content can be freely distributed, but in order to access said content, one must first obtain the proper key (via payment, for example).

Regarding Claim 2,

Fanning as modified by Hale and Gutberlet discloses the method of claim 1, in addition, Fanning discloses that the collecting is performed by using a popular digital file sharing program (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); and Hale discloses that collections, distributions, and redistributions are performed using a popular digital file sharing program (Column 10, line 42 to Column 11, line 26).

Regarding Claim 3,

Fanning as modified by Hale and Gutberlet discloses the method of claim 1, in addition, Fanning discloses that the collecting is performed by using a popular digital file sharing server (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); and Hale discloses that collections, distributions, and redistributions are performed using a popular digital file sharing server (Column 10, line 42 to Column 11, line 26).

Art Unit: 2137

3. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Gutberlet, further in view of Schneier (Schneier, B., "Applied Cryptography", 1996, pp. 4-5).

Regarding Claim 4,

Fanning as modified by Hale and Gutberlet does not disclose that the collected digital music file is encrypted by a public key encryption algorithm.

Schneier, however, discloses that the collected digital music file is encrypted by a public key encryption algorithm (Pages 4-5). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the encryption method of Schneier into the real-time searching system of Fanning as modified by Hale and Gutberlet in order to obtain a secure form of encryption, in which only the desired party having the proper private key can decrypt the information being sent.

Regarding Claim 5,

Fanning as modified by Hale and Gutberlet does not disclose that the collected digital music file is encrypted by a public key encryption algorithm.

Schneier, however, discloses that the collected digital music file is encrypted by a public key encryption algorithm (Pages 4-5). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the encryption method of Schneier into the real-

time searching system of Fanning as modified by Hale and Gutberlet in order to obtain a secure form of encryption, in which only the desired party having the proper private key can decrypt the information being sent.

Regarding Claim 6,

Fanning as modified by Hale and Gutberlet does not disclose that the collected digital music file is encrypted by a public key encryption algorithm.

Schneier, however, discloses that the collected digital music file is encrypted by a public key encryption algorithm (Pages 4-5). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the encryption method of Schneier into the real-time searching system of Fanning as modified by Hale and Gutberlet in order to obtain a secure form of encryption, in which only the desired party having the proper private key can decrypt the information being sent.

4. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Dittmann (Dittmann et al., "Copyright-Copywrong", 2000, pp. 14-17, obtained from IEEE).

Regarding Claim 7,

Fanning discloses a method comprising collecting a digital music file according to a kind of music of the digital music file by searching a network (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to

Column 6, line 7); but does not disclose inserting a watermark containing a predetermined secret information in the collected digital music file and redistributing the watermarked digital music file through the network.

Hale, however, discloses preventing reduction of sales amount of records due to a digital music file illegally distributed through a communication network by selecting an illegally produced digital music file which is derived from a record of a cooperating record company (Column 7, line 24 to Column 8, line 37); modifying the digital music file (Column 8, lines 1-37); and redistributing the modified digital music file through the network (Column 8, line 38 to Column 9, line 32). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the rights protection system of Hale into the real-time searching system of Fanning in order to inhibit and deter unauthorized users to proprietary media, while leaving legitimate files unaffected, thereby rendering the use of media brokering systems ineffective, such that users will be less likely to use such systems for illegal purposes.

Dittmann, however, discloses inserting a watermark containing a predetermined secret information in the collected digital music file (Pages 14-17). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the watermarking techniques of Dittmann into the real-time searching system of Fanning as modified by Hale in order to more efficiently track the redistributed music files,



Art Unit: 2137

determine who downloads such redistributed music files, identify and track how the material is being used, and/or to provide additional data that can add value to the material.

Regarding Claim 8,

Fanning as modified by Hale and Dittmann discloses the method of claim 7, in addition, Fanning discloses that the collecting is performed by using a popular digital file sharing program (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); and Hale discloses that collections, distributions, and redistributions are performed using a popular digital file sharing program (Column 10, line 42 to Column 11, line 26).

Regarding Claim 9,

Fanning as modified by Hale and Dittmann discloses the method of claim 7, in addition, Fanning discloses that the collecting is performed by using a popular digital file sharing server (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); and Hale discloses that collections, distributions, and redistributions are performed using a popular digital file sharing server (Column 10, line 42 to Column 11, line 26).

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Gutberlet, further in view of Cuckoo ("How To Lay Cuckoo's Eggs",

pp. 1-5, 10/18/2000, obtained from

<http://web.archive.org/web/20001018072441/http://www.hand-2-mouth.com/cuckooegg/resources.htm>).

Fanning as modified by Hale and Gutberlet discloses the method of claim 1, in addition, Fanning discloses that collecting the digital music file comprises selecting one of a plurality of digital music files having a having a same name, size, and playing time (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); but may not disclose selecting one of the files having a greatest number of the same file.

Cuckoo, however, discloses collecting one of a plurality of digital music files that has a greatest number of files having the same name, size, and playing time (Pages 1-3). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the Cuckoo Egg creation system of Cuckoo into the real-time searching system of Fanning as modified by Hale and Gutberlet in order to obtain maximum distribution of the modified files, thereby increasing effectiveness of the system in thwarting illegal uses of content sharing systems, such as P2P.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Dittmann, further in view of Cuckoo.

Fanning as modified by Hale and Dittmann discloses the method of claim 7, in addition, Fanning discloses that collecting the digital music file comprises

selecting one of a plurality of digital music files having a having a same name, size, and playing time (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); but may not disclose selecting one of the files having a greatest number of the same file.

Cuckoo, however, discloses collecting one of a plurality of digital music files that has a greatest number of files having the same name, size, and playing time (Pages 1-3). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the Cuckoo Egg creation system of Cuckoo into the real-time searching system of Fanning as modified by Hale and Dittmann in order to obtain maximum distribution of the modified files, thereby increasing effectiveness of the system in thwarting illegal uses of content sharing systems, such as P2P.

7. Claims 12-14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Cuckoo.

Regarding Claim 12,

Fanning discloses a method comprising:

Searching a network for a digital music file (Column 3, line 33 to Column 4, line 19);

Identifying a plurality of digital music files that are substantially similar to the digital music file (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); and

Art Unit: 2137

Collecting one of the plurality of digital music files that has the same name, size, and playing time (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7);

But does not explicitly disclose modifying the collected file and redistributing the modified file.

Hale, however, discloses preventing reduction of sales amount of records due to a digital music file illegally distributed through a communication network by searching a network for an illegally produced digital music file, which is derived from a record of a cooperating record corporation (Column 6, lines 44-56; and Column 7, lines 24-67); identifying a plurality of digital music files that are substantially similar to the illegally produced digital music file (Column 7, line 24 to Column 8, line 37); selecting one of the plurality of digital music files having the same name, size, and playing time (Column 7, line 24 to Column 8, line 37); modifying the collected digital music file (Column 8, lines 1-37); and redistributing the modified digital music file through the network (Column 8, line 38 to Column 9, line 32). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the rights protection system of Hale into the real-time searching system of Fanning in order to inhibit and deter unauthorized users to proprietary media, while leaving legitimate files unaffected, thereby rendering the use of media

brokering systems ineffective, such that users will be less likely to use such systems for illegal purposes.

Cuckoo, however, discloses collecting one of a plurality of digital music files that has a greatest number of files having the same name, size, and playing time (Pages 1-3). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the Cuckoo Egg creation system of Cuckoo into the real-time searching system of Fanning as modified by Hale in order to obtain maximum distribution of the modified files, thereby increasing effectiveness of the system in thwarting illegal uses of content sharing systems, such as P2P.

Regarding Claim 13,

Fanning as modified by Hale and Cuckoo discloses the method of claim 12, in addition, Fanning discloses that searching the network for the illegally produced digital music file comprises searching the network according to a kind of music of the digital music file (Column 3, line 33 to Column 4, line 19).

Regarding Claim 14,

Fanning as modified by Hale and Cuckoo discloses the method of claim 12, in addition, Fanning discloses that the collecting and redistributing are performed by using a popular digital file sharing server (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); and Hale disclose that collections, distributions, and

Art Unit: 2137

redistributions are performed using a popular digital file sharing server  
(Column 10, line 42 to Column 11, line 26).

Regarding Claim 18,

Fanning as modified by Hale and Cuckoo discloses the method of claim 12, in addition, Hale discloses that modifying the collected digital music file comprises altering original content of the collected digital music file (Column 8, lines 1-37); and Cuckoo discloses that modifying the collected digital music file comprises altering original content of the collected digital music file (Pages 1-3).

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Cuckoo, further in view of Gutberlet.

Fanning as modified by Hale and Cuckoo does not explicitly disclose that modifying the collected digital music file comprises encrypting the collected digital music file with a predetermined key.

Gutberlet, however, discloses that modifying the collected digital music file comprises encrypting the collected digital music file with a predetermined key (Pages 7-8, Section 3.1.1). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the DRM system of Gutberlet into the real-time searching system of Fanning as modified by Hale and Cuckoo in order to protect the copyrights of an entity through licensing and distribution of keys, whereby content can be freely distributed, but in order to

Art Unit: 2137

access said content, one must first obtain the proper key (via payment, for example).

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale, Cuckoo, and Gutberlet, further in view of Schneier.

Fanning as modified by Hale, Cuckoo, and Gutberlet does not disclose that encrypting the collected digital music file comprises encrypting with a public key encryption algorithm.

Schneier, however, discloses that encrypting the collected digital music file comprises encrypting with a public key encryption algorithm (Pages 4-5). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the encryption method of Schneier into the real-time searching system of Fanning as modified by Hale, Cuckoo, and Gutberlet in order to obtain a secure form of encryption, in which only the desired party having the proper private key can decrypt the information being sent.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Cuckoo, further in view of Dittmann.

Fanning as modified by Hale and Cuckoo does not explicitly disclose inserting a watermark containing a predetermined secret information in the collected digital music file.

Dittmann, however, discloses inserting a watermark containing a predetermined secret information in the collected digital music file (Pages 14-17). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the watermarking techniques of Dittmann into the real-time searching system of Fanning as modified by Hale and Cuckoo in order to more efficiently track the redistributed music files, determine who downloads such redistributed music files, identify and track how the material is being used, and/or to provide additional data that can add value to the material.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Popham whose telephone number is (571)-272-7215. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2137

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey D Popham  
Examiner  
Art Unit 2137

  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER